



# UNITED STATES PATENT AND TRADEMARK OFFICE

5  
UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/824,337	04/13/2004	Tatsuhiro Sato	37904-0054	5386
28481	7590	06/14/2007	EXAMINER	
TIAJOLOFF & KELLY CHRYSLER BUILDING, 37TH FLOOR 405 LEXINGTON AVENUE NEW YORK, NY 10174			NGUYEN, PHU HOANG	
ART UNIT	PAPER NUMBER		1731	
MAIL DATE	DELIVERY MODE		06/14/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/824,337	SATO, TATSUHIRO	
Examiner	Art Unit		
Phu H. Nguyen	1731		

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 4/16/2007.

2a)  This action is **FINAL**.                            2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)  Claim(s) 1-9 and 12-26 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 1-9 and 12-26 is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All    b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892) 4)  Interview Summary (PTO-413)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date. \_\_\_\_.  
3)  Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date. \_\_\_\_.  
5)  Notice of Informal Patent Application  
6)  Other: \_\_\_\_.

## DETAILED ACTION

### ***Claim Objections***

Claims 1-4 are objected to because of the following informalities: claims 1-4 have the phrase "the quartz glass jig" that is confusing since the preamble has the phrase "a method for producing a quartz glass jig". The phrase "the quartz glass jig" can be interpreted to mean the final product with the given preamble. Therefore, the phrase "the quartz glass jig" should be amended to state "the desired shape" to differentiate from the final product. For purpose of examination, the examiner assumes that the phrase 'the quartz glass jig" means "the desired shape" which is an intermediate product during the method of producing a quartz glass jig.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-8, 12-15, 17-20, 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over the applicant's admitted prior art in view of Takenaka et al. (U.S Patent No. 6077451), further in view of Honma et. al (JP 07183240) for reasons of record set forth in the last Office action (mailed date 12/12/2006).

Claims 9, 16, 21 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over the applicant's admitted prior art, Takenaka et al. (U.S Patent No.

6077451), Honma et. al (JP 07183240) as applied to claims 5,12,17 and 22 above and further in view of Hays (U.S Patent No. 3511727) for reasons of record set forth in the last Office action (mailed date 12/12/2006).

***Response to Arguments***

Applicant's arguments filed 4/16/2007 have been fully considered but they are not persuasive.

Applicant argue primarily that the quartz glass jigs produced by method of admitted prior has metal impurities that can not be removed by washing or cleaning the jig and Takenaka teaches a method for measuring impurities in a silicon material; therefore Takenaka gives no suggestion or motivation to one of ordinary skill in the art to modify any prior art methods of making a quartz glass. Although the method of Takenaka is used primarily for measuring impurities, it is inherent that the impurities need to be removed for measuring. Takenaka teaches removing the impurities by gas phase etching (column 5, line 3-7). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the teaching of Takenaka for removing impurities to remove impurities in the production of the quartz glass jigs as taught by the admitted prior art.

Applicant further argues that Honma teaches a method for manufacturing a quartz glass fixture in which the metal impurities are removed from the surface of the various quartz glass components making up the fixture using gas purification before the fixture is assembled. However, the invention as claimed does not explicitly indicate that the gas phase etching and gas phase purification step are performed on a surface layer

of an assembled jig. Furthermore, the argument does not point out where Honma suggest that the final step of making quartz glass step (assembly) involved increasing contamination of the surface layer that was purified in the previous process step.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phu H. Nguyen whose telephone number is 571-272-5931. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

P.N 6/8/2007

  
STEVEN P. GRIFFIN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700